The Afghanistan Engineering Support Program assembled this annual report. It is an approved, official USAID document. Budget information contained herein is for illustrative purposes. All policy, personal, financial, and procurement sensitive information has been removed. Additional information on the report can be obtained from Firouz Rooyani, Tetra Tech Sr. VP International Operations, (703) 387-2151.

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FROM THE AMERICAN PEOPLE

ENGINEERING SUPPORT PROGRAM

2010 ANNUAL REPORT

Draft Submitted: November 1, 2010
Final Submitted: November 13, 2010
This publication was produced for review by the United States Agency for International Development. It was prepared by Tetra Tech

This report was prepared for the United States Agency for International Development, Contract No. EDH-I-00-08-00027-00, Task Order 01, Afghanistan Engineering Support Program.

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TETRA TECH

November 13, 2010

[redacted]
U.S. Agency for International Development
Café Compound
U.S. Embassy
Great Masood Road
Kabul, Afghanistan

Re: Contract No. EDH-I-00-08-00027-00, Order No. 1; Afghanistan Engineering Support Program; Annual Report for FY 2010

Dear [redacted]:

Per section C.5, "Deliverables," paragraph G of the above referenced contract, we are submitting the Final 2010 Annual Report for the 2010 Fiscal Year with OIEE concurrence. The report covers the period of November 14, 2009 through September 30, 2010.

Sincerely,

[redacted]
Acting Chief of Party, OIEE-AESP
Tetra Tech

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AFGHANISTAN ENGINEERING SUPPORT PROGRAM

2010 ANNUAL REPORT

November 13, 2010

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1.0 Executive Summary

This is the FY2010 Annual Report submitted under Task Order EDH-I-00-08-00027-00, Order No. 1; Afghanistan Engineering Support Program. The reporting period is for November 14, 2009 through September 30, 2010.

Table 1-1
Complete and Active 2010 FY Work Orders

Work Order Type	Sector					
	Energy	Water and Sanitation	Water Resources	Transportation	Vertical Structures	Technical Support Services
Administrative Work Orders	16	7	9	4	16	9
Long Term Work Orders	1	0	0	2	7	0
The value of Long Term Work Orders initiated in FY2010 total [redacted].						

The purpose of the contract is to provide technical assistance to the Office of Infrastructure, Engineering & Energy (OIEE), by providing a quick response from a Kabul based core of expat architectural and engineering professionals. The Kabul-based Tetra Tech Team provides planning, design, technical and oversight support, while also contributing to capacity building, mentoring, and collaboration/coordination with appropriate stakeholders. The estimated period of performance for this contract is five years from a notice to proceed date of November 14, 2009.

Technical assignments and tasks are categorized as either administrative (WO-A) or long term (WO-LT) work orders. Administrative work orders (WO-A) are defined as those assignments taking less than or equal to 18 man days (144 man hours) and are most often performed by the core staff in Kabul. Long Term work orders (WO-LT) are defined as those tasks taking longer than 18 man days (144 man hours), and supported by the Home Office staff as a reach back assignment with Kabul core staff providing coordination and management.

Deliverables for the Contract include the initial and Year 2 Work Plans, Security Plan, Weekly Meeting Minutes, Quarterly Progress Reports, Performance Monitoring Plan (PMP), Annual Work Plan, Annual Project Report and Final Report.

In this reporting period, TetraTech concentrated on the expanding program needs through specific requests from USAID to add program staff members in the Transportation, Electrical, Mechanical, and Structural disciplines and specific work orders.

Our commitment to capacity development of Afghan staff individuals was supported by the hiring of four local nationals in Information Technology, Architecture and the Administration disciplines. The program is projected to expand in FY2011 to Afghan partner organizations that will assist in providing 17 Local National personnel for the Strategic Provincial Roads (SPR) Roads work order and build the technical architectural and engineering staff in the Kabul office to nine. The Provisional Reconstruction Team (PRT) work order will

additionally require a local national staff expansion of 12. PRT work in and with the local communities will identify and facilitate reconstruction and development in the provinces. This work is expected to begin early into FY2011.

Tetra Tech also began the capacity building program where Tetra Tech's female engineering staff visited Kabul University and hosted a few meetings focused on mentoring fourth and fifth year engineering and architecture students of the school of engineering. A subsequent field trip was held to view Ghazi Boys High School while under construction.

2.0 Program Staffing

The OIEE AESP Program added four key expat staff members during the FY2010 that focused on strengthening our discipline specific capabilities for expanding work order support and quality control. A TetraTech Airport Master Planner was deployed for a four week period to perform the Limited Airport Master Plan (LAMPS) under the ongoing Rehabilitation of Regional Airports project. In support of Tetra Tech's capacity building program, four LN support staff members were added in the areas of Information Technology, Administration and Vertical Structures.

2.1 Expat Staffing

Table 2-1
International Staffing and Deployment

Employee Name	Position	Afghanistan Arrival	Afghanistan Departure
[redacted]	Chief of Party	11/20/09	4/23/09
[redacted]	Finance Manager	11/20/09	N/A
[redacted]	Vertical Structures Lead	12/6/09	5/27/10
[redacted]	Energy Lead	12/6/09	N/A
[redacted]	IT Specialist (STTA)	12/6/09	5/3/10
[redacted]	Contracts Manager	12/13/09	N/A
[redacted]	Chief of Party (1)	12/23/09	N/A
[redacted]	Junior Civil Engineer	12/23/09	N/A
[redacted]	Water/Wastewater Engineer (2)	12/23/09	6/23/10
[redacted]	Water Resources Lead	2/17/10	N/A
[redacted]	Junior Civil/Structural Engineer	2/17/10	N/A
[redacted]	Geologist (STTA) (3)	3/8/10	6/12/10
[redacted]	MIS Manager/Technical Writer	3/15/10	N/A
[redacted]	Acting Chief of Party	6/14/10	6/27/10
[redacted]	Vertical Structures Lead	6/14/10	N/A
[redacted]	Airport Planner (STTA) (4)	6/14/10	N/A
[redacted]	Technical Support Manager (5)	6/26/10	N/A
[redacted]	Water/Wastewater Lead	6/26/10	N/A
[redacted]	Geologist (STTA)	7/13/10	N/A
[redacted]	SPR Manager	7/31/10	N/A
[redacted]	PRT Manager	7/31/10	N/A
[redacted]	Procurement and Finance Auditor	7/19/10	8/16/10
[redacted]	Deputy Chief of Party	8/26/10	N/A
[redacted]	Electrical Engineer	8/26/10	9/4/10
[redacted]	Administrative Manager	9/13/10	N/A
[redacted]	Information Technology	10/3/10	10/24/10

Notes:
(1) Water/Wastewater Lead 12/23/10 and then transferred to the position of Chief of Party on 4/23/10 after [redacted] Departure
(2) MIS Manager 12/23/10 and then transferred to the position of Water/Wastewater Engineer on 3/15/10 after [redacted] arrival
(3) STTA position to support WO-LT-0002 (AUAF) and WO-LT-0004 (MoPH)
(4) STTA position to support WO-LT-0008 (LAMPS)
(5) LTTA position added to for support Technical Leads

2.2 Expat Staffing Challenges

[redacted], Chief of Party (COP), returned to the US in April for the initial R&R at the 6 month assignment milestone. He was unable to return to the project for medical reasons. [redacted], Water/Wastewater Lead, served as COP through the end of the quarter.

[redacted] Water/Wastewater Lead, and [redacted], Technical Support Manager, were added to the base staff to augment program technical capabilities. A Mid-level Wastewater Engineer position was also added to provide technical engineering support for the Ghazi Boys High School and the Sardar Girls High School projects due to expanding project scope that began with the design of the Water, Sanitation and electrical systems for the building under construction and evolved into site design and oversight of the administration building being design by another USAID consultant.

The initial Vertical Structures Lead Architect was demobilized in the 3rd quarter. After Tetra Tech provided written notification and justification to USAID and after a short recruiting period, this position was filled by [redacted] These actions facilitated an effective transition with the evolving [redacted]District and Regional Training Center work order being performed for the Democracy and Government (D&G) division of USAID. This work order was initially focused on permanent buildings for training civil servants and the construction of government offices in the provinces. Over the course of four months, the program changed from the design of four buildings [Training Center (TC), District Administration Center (DC), Rule of Law Courthouse (CH) and Government Administration Building (GB)] to the design of two prototypes, the Provincial Training Center and Regional Training Center. These challenges were overcome through collaboration with the USAID TPOC and the D&G staff and effectively balancing and scheduling local and home office reach back resources.

In early March, due to the expanding program needs, requests were received from the USAID COTR and ACOTR to add program staff members in the Transportation, Electrical, Mechanical, and Structural disciplines. In addition, a Technical Support Manager position was added to assist in overall work order coordination and implementation.

The Contract/Task Order approval process for adding these positions was not well defined and, therefore, took more time than expected. Through this experience USAID and TetraTech developed clear processes for the contract modifications required to implement these important changes. Modification (MOD) 6, which incorporated these additional positions, was approved on June 13, 2010. MOD 6 provided a realignment of the Level of Effort (LOE) man-day budgets by moving budgets from the later years into the early years of the program. This resulted in a MOD that did not require the addition of budget. MOD 8, which proposed further budget realignment to add local national and expat staff, was approved by the Contracting Officer (CO) August 3, 2010.

2.3 Local National Staffing

Table 2-2 Local National Staffing		
Employee Name	**Position**	**Start Date**
[redacted]	Accountant	3/23/10
[redacted]	Internal Auditor	3/27/10
[redacted]	Government Liaison	12/2/09
[redacted]	Facilities Manager	3/20/10
[redacted]	Administrative Assistant	4/21/10
[redacted]	IT Manager	4/15/10
[redacted]	IT Assistant	4/20/10
[redacted]	Contracts Assistant/Buyer	3/22/10
[redacted]	Mid-Level Architect	4/5/10
[redacted]	Administrative Assistant	9/13/10
[redacted]	HR Manager	7/3/10
[redacted]	Facilities Maintenance	3/20/10

In addition to the Local National Staff listed above, four LNs are employed for facilities maintenance and four cooking staff are employed.

2.4 Local National Staff Challenges

A LN Information Technology (IT) Manager and IT Assistant were added during the beginning of the 3rd quarter as the expat IT Specialist was demobilized. LN IT staff is now being supported by an IT reach back specialist and the local expat MIS Manager. One-on-one daily contact is occurring, supplemented by weekly management conference calls, to ensure IT functionality and operability remains at the highest levels.

3.0 Contract/Task Order

3.1 Contract/Task Order Activities

November 14, 2009: Task Order signed with initial obligated amount of [redacted]

December 7, 2009: USAID issued MOD 1. The purpose of the MOD was to incrementally fund the Task Order by [redacted] thereby increasing the total obligated amount from [redacted] to a new total obligated amount of [redacted] This was provided for the continued funding of the project.

March 4, 2010: USAID issued MOD 2. The purpose of the MOD was to incrementally fund the Task Order by [redacted] thereby increasing the total obligated amount from [redacted] to a new total obligated amount of [redacted]. The purpose of this MOD was to provide funding for WO-LT-0002 (AUAF Concept Design).

March 30, 2010: USAID issued MOD 3. The purpose of the MOD was to incrementally fund the Task Order by [redacted] thereby increasing the total obligated amount from [redacted] to a new total obligated amount of [redacted]. The purpose of this MOD was to provide funding for WO-LT-0004 (MoPH), WO-LT-0005 (Ghazi Boys High School) and WO-LT-0006 (Sardar Girls School).

May 2, 2002: USAID Contracting Officer issued an amendment to the COTR, [redacted] revising the Contract Administration authorities to include Approval for International Travel.

May 2, 2010: USAID issued grantee letter to TetraTech as a USAID contractor and applicable taxation provisions found in Section B.4 of the SOAG. This allowed Tetra Tech to advance the process of obtaining tax exemption status. (The tax exemption certificate was issued to Tetra Tech by the Department of Revenue on June 30, 2010 formalizing the administrative process).

May 4, 2010: USAID issued MOD 4. The purpose of the MOD was to incrementally fund the Task Order by [redacted] thereby increasing the total obligated amount from [redacted] to a new total obligated amount of [redacted] The purpose for the MOD was to provide funding for additional Expat staff positions in the areas of Transportation, Mechanical, Electrical and Structural disciplines funding the project through fiscal year end 2010.

May 4, 2010: USAID inquired about Tetra Tech's ability to perform Program Management Services under the scope of the OIEE-AESP Task Order to support a pending Energy work order. It was determined that TetraTech can provide these services.

May 12, 2010: USAID issued MOD 5. The purpose of the MOD was to incrementally fund the Task Order by [redacted] thereby increasing the total obligated amount of [redacted] to a new obligated amount of [redacted]. This MOD was in support of the additional effort needed for the WOLT-0008 LAMPS work order.

June 16, 2010: USAID issued MOD 6. The purpose of the MOD was to revise the Labor Categories and Work Days Ordered (LOE) of the Task Order. The total LOE ordered and the estimated cost remained unchanged as MOD 4 provided the funding for this LOE increase; however, contract dollars allocated over the five year Task Order duration were shifted to earlier years.

July 24, 2010: USAID issued Approval of the Regional Rest Break in response to the TetraTech Foreign Service Leave corporate and project policies that were submitted to USAID-OAA in March 2010.

August 1, 2010: USAID issued MOD 7. The purpose of the MOD was to incrementally fund the Task Order by [redacted] thereby increasing the total obligated amount of [redacted] to a new obligated amount of [redacted]. This MOD was in support of the additional effort needed for the AVIPA agricultural facility design reviews.

August 3, 2010: USAID issued MOD 8. The purpose of the MOD was to revise the Labor Categories and Work Days Ordered (LOE) of the Task Order. The total LOE ordered and the estimated cost remained unchanged; however, contract dollars allocated over the five year Task Order duration were shifted to earlier years.

September 15, 2010: USAID issued Contracting Officer's Technical Representative (COTR) Designation-Contract/Task Order Administration memorandum designating [redacted] as the new Task Order COTR.

September 25, 2010: USAID issued MOD 9. The purpose of the MOD was to incrementally fund the Task Order by [redacted] thereby increasing the total obligated amount of [redacted] to a new obligated amount of [redacted] This MOD was in support of funding for contract Year 2.

3.2 Contract/Task Order Deliverables

February 23, 2010	Final Operational Security Plan and Procedures
February 23, 2010	Final 2010 Q1 Quarterly Report
March 5, 2010	Foreign Service Leave Policy
March 14, 2010	Final Work Plan (Year 1)
April 4, 2010	Final Performance Monitoring Plan (PMP)
April 5, 2010	Branding and Marking Plan
May 6, 2010	Final 2010 Q2 Quarterly Report
July 21, 2010	Final 2010 Q3 Quarterly Report
September 1, 2010	Draft Work Plan (Year 2)

The electronic copy for the above referenced deliverables can be found in the CD provided in Appendix B.

3.3 Contract/Task Order Issues

3.3.1 Dynamics of USAID Engineering Requirements

The work orders that USAID has required under this contract have expanded rapidly during the first year. The focus of these work orders has grown toward the energy sector which the original contract did not envision. Eight MODs to the contract have been processed with substantial increases in expat personnel (from 10 to 19). The use of LN personnel as also increased (from 39 to 70). The flexibility to use reach back personnel has allowed Tetra Tech to meet USAID requirements within the level of effort prescribed by the Task Order.

3.3.2 Security Issues

Security concerns continue to shape the requirements of work orders under this contract. President Karzai's Decree 62, which disbands Private Security Companies, could impact the method in which work orders are accomplished by restricting travel of expat engineers. The LN engineering staff has had to become more familiar with the engineering design requirements in order to conduct site visits and assessments. A successful example was the village electrification along the Parwan Road to Bagram Airfield. This quick reaction work, with design done and coordinated by Tetra Tech, was accomplished with extensive LN participation. It resulted in equipment purchased by the Provincial Reconstruction Team and installation done by the local power company. The increase in the LN LOE allowed TetraTech to accomplish this work order quickly and with limited exposure of expat staff to potentially dangerous situations.

3.3.3 Changing USAID Priorities

Several of the approved work orders have had substantial changes in the Scope of Work directed by USAID. Examples are the PRT support program for which Tetra Tech was directed not to hire prescribed LOE, and the SPR roads program where the LOE was reduced from 30 LN staff to 17 due to changing road construction requirements. Tetra Tech's focus on USAID priorities resulted in the continued ability to provide the engineering services USAID requires in an extremely challenging engineering and security environment.

4.0 Work Orders

4.1 Sector Activities

The following sections describe the activities performed in each sector during FY2010 under this Task Order. A CD is provided in Appendix B that includes the Scopes of Work (SOW) and deliverables for the Administrative and Long Term Work Orders that were active FY2010.

4.1.1 Energy

The Energy sector began work in the First Quarter of 2010 by supporting vertical structures work on the Training Centers and District Centers. Efforts were also made to define the utility needs at the American University of Afghanistan. Designs were initiated for the electric utilities at Ghazi Boys High School.

The Energy sector continued work in the Second Quarter of 2010 by continuing to support the vertical structures work, continuing work at AUAF and Ghazi BHS. A study of the use of Heavy Fuel Oil (HFO) fuel use at the Tarakhil power plant was accomplished. A study of the 220-kV transmission line from Pul-e-Khumri to Chimtala was begun. Energy sector personnel travelled to Jalalabad to collect data for additional work to be directed to provide electric power to customers in Nangarhar province.

Third quarter work in the Energy sector included continued efforts to supply large customers like high schools and ministries with commercial electric power service. Research for capacity, expansion and rehabilitating of the Afghan electrical transmission and distribution systems was conducted.

In the fourth quarter, activity in the Energy Sector picked up. A report was issued that proposed building an electric power transmission line from Kabul to Kandahar. More transmission line studies are being proposed. So is a study of the evolution of the Afghan Transmission and Generation system over the next 20-years. Concept designs, for detailed implementation by the electric utility company, DABS, are planned for over 40 villages in Parwan province. Another study will look at delivering highly reliable commercial power to selected customers in Kabul.

4.1.2 Vertical Structures

The most notable Vertical Structures effort was the completion in August of the 100% design of the prototype regional and provincial Afghanistan Civil Service Institute training facilities. Site development packages for (4) four locations throughout the country will follow. Design Reviews were performed for several projects including, the AVIPA Raisin Processing Plant, National Load Control Center, and Facility of Higher Education. Quality Control technical oversight was performed on the building and runway construction of Chagcharan, Maimana, and Faizabad airports.

Design Reviews were also completed for the Kabul University Men's Dining Facility, and Laundry Building, along with third party Quality Control and technical support. Quality Control and technical support were also provided for the Kabul University Men's Dormitory renovation.

Working with USAID and the Department of State, the design of a prototype, multi-use communications tower was completed, bid out, and construction is now underway at Kandahar Airfield. These towers are to be used as platforms for the expansion of TV, Radio and Cellular Communications on Military bases in Southern Afghanistan. In addition, the Concept Design for the American University in Afghanistan (AUAF) campus was completed.

Tetra Tech established the necessary requirements for conducting land surveys at several project construction sites and for performing site geotechnical/geologic site investigations, including providing foundation design-base parameters for building structures and miscellaneous site civil engineering design input for Tetra Tech design as well as to URS and others as required for the several projects listed below:

- Proposed New Ministry of Public Health (MOPH) Facility in west Kabul
- American University of Afghanistan (AUAF) Project Site in southwest Kabul
- Ghazi Boys High School (GBHS) Proposed New Administration Building in Kabul
- Sarder Girls High School (SGHS) Project Site in Kabul
- House 1 Annex Expansion for Tetra Tech Compound in Kabul
- Communications Tower Site No. 1 for Three Towers Project at Kandahar Airfield (KAF)

Tetra Tech also provided supervisory direction to several subcontractors when site surveying services and geotechnical/geologic investigations were being performed including the installations of deep water supply and monitoring wells.

Tetra Tech provided general oversight, technical reviews, and report evaluations on two hydrogeological survey projects performed by Ministry of Mines (MOM) personnel. The first survey was performed for the proposed new Ministry of Public Health (MOPH) Facility construction project and the second survey was completed for the existing American University of Afghanistan (AUAF) Project Site. Three water supply wells had previously been installed on the AUAF project site, however, only one well was operational. One water supply well had been installed just to the southeast of but offsite from the MOPH property which has been used to date for MOPH on-site water supply purposes. For ultimate site development purposes, Tetra Tech designed and directed the installation of an on-site MOPH water supply well and provided the installed water well information to URS for perusal, the design engineer-of-record for the MOPH Facility.

4.1.3 Water and Sanitation

The primary focus for Water and Sanitation discipline were the completion of the site grading and utility drawings and specifications for the Ghazi Boys High School (GBHS) and Sardar Girls School (SGHS). These project designs included water supply, disinfection, and distribution facilities, wastewater collection and treatment (via a packaged wastewater treatment system), greywater collection, storage, and pumping, site improvements such as sidewalks, parking, and student assembly areas, and grading and drainage improvements.

A bid set of drawings and specifications for both of these school projects were delivered to USAID in September 2010. Tetra Tech also produced a bill of quantity and cost estimate for both of these projects, to assist USAID in bidding this work. During the course of this design work Tetra Tech worked closely with USAID, UNOPS (the implementing partner for the construction of the schools), and IRD (International Relief and Development performing quality control work for USAID on the schools projects) to ensure that the site grading and utility design is coordinated with the school design, and necessary input into the design was obtained in a timely manner from USAID and its associated construction partners. A goal during the design of the site grading and utilities contracts has been to utilize materials available locally, and to provide dependable utility systems that are not overly complex and can be operated and maintained by trained LNs.

Tetra Tech also coordinated with the MOE (Ministry of Education), and DABS (Da Afghanistan Bereshna Sherkat, the local electrical utility) in developing the design of the electrical service to both of the high schools, and coordinating the establishment of electrical service at both of the high schools.

4.1.4 Water Resources

A summary of work performed during the FY 2010 by the Water Resources group primarily included providing technical support, document reviews, and design input on various urban and rural civil engineering projects to USAID and others, and is briefly described in the following paragraphs.

Tetra Tech performed the following work orders for USAID on three existing dam and reservoir facilities, namely the Kajaki Dam located in Helmand Province and two Pul-e-Khumri hydroelectric dam facilities, Pul-e-Khumri I and Pul-e-Khumri II, located in Baghlan Province.

4.1.4.1 Kajaki Dam Project (Helmand Province).

Tetra Tech, along with USAID and Louis Berger International project personnel during an initial site visit, provided input to USAID on the feasibility of going ahead with the planned installation of a Unit 2 turbine-generator at the existing hydroelectric dam facility. Thereafter, this work was followed by: 1) performing a review of the Contract Documents Package (i.e., bidding documents, construction drawings, and technical specifications) currently being put together by the USACE for project bidding purposes (originally planned for by USAID in October 2010); and 2) developing a project construction cost estimate for the turbine-generator installation unit.

4.1.4.2 Pul-e-Khumri Hydroelectric Plant Facilities (Baghlan Province).

In a first work order, Tetra Tech performed separate site visits and technical feasibility reviews of the previously-prepared USACE project reports for the existing Pul-e-Khumri I and Pul-e-Khumri II hydroelectric plant facilities. Thereafter, under a second work order, Tetra Tech prepared updated cost estimates to the original USACE 2008 costing as well as developed additional construction cost estimates for the two facilities that the USACE did not initially present for both short- and long-term construction time periods.

4.1.4.3 Proposed Multipurpose Dam/Reservoir Projects (Kabul and Bamyan River Basins)

Tetra Tech performed the following tasks for USAID on two major dam and multi-purpose reservoir projects, namely the Shatoot Storage Dam Project and the Sarobi II Hydroelectric Dam Project in the Kabul River Basin. These two projects reportedly have met the criteria required for design and construction as presented in The World Bank report entitled "Scoping Strategic Options for Development of the Kabul River Basin, a Multisectoral Decision Support System Approach" (prepared for the Sustainable Development Department, South Asia Region in 2010).

Reviewed the feasibility studies previously completed for the Shatoot Storage Dam Project by Pooyab Consulting Engineers (Tehran, Iran) and the former Russian-designed Sarobi 2-1 and 2-2 hydroelectric run-of-river (ROR) dams project as part of the USAID proposed new Sarobi II ROR hydroplant project.

Tetra Tech concurred with the findings of the Pooyab 2010 feasibility studies for the Shatoot Storage Dam Project, and recommended that further feasibility studies be started for this proposed dam project. Tetra Tech also recommended that full-blown feasibility studies be performed for the USAID-proposed Sarobi II 200-meter high hydropower dam and appurtenances.

4.1.5 Transportation

Work in the Transportation sector included the QA Oversight for the Strategic Provincial Roads (SPR) program, the Badakshan Bridge design review, and a pavement design review of the Doshi to Salang Tunnel. Activities also included airport planning and technical support under the LAMPs program. Tetra Tech started and continued to provide third-party geotechnical quality assurance (QA) and technical review services to USAID and FAA on the Chagcharan, Maimana, and Faizabad Regional Airports.

4.1.5.1 Strategic Provincial Roads (SPR) Program

USAID provided Tetra Tech with a Notice to Proceed on June 7, 2010 with the SPR Program QA Oversight as presented to USAID in the Statement of Work (SOW) and Rough Order of Magnitude (ROM) dated April 22, 2010. The proposed QA Oversight Program involved developing a Road Quality Assurance Plan, hiring, training and deploying 28 Afghan QA monitors/engineers, one Afghan Administrative Assistant, one Accountant, and expat supervisors (Lead Transportation & QA Engineering Manager) to oversee the program.

The SPR QA Oversight Program was reduced due to deteriorating security and lack of performance of some of the roadway contractors throughout several provinces. On August 19, 2010 USAID provided written authorization to Tetra Tech to hire and train 17 Afghan QA monitors/engineers and support staff. Amendments to the SOW and ROM were made accordingly and presented to USAID for approval.

Tetra Tech moved forward as directed by USAID and interviewed and hired Afghan staff to fill the positions for the SPR QA Oversight Program. The Administrative Assistant was the first hire and started on September 13, 2010. Offers were made to QA monitors/engineers that were interviewed and are scheduled to begin in October 2010.

On September 23 of 2010, Tetra Tech staff member [redacted] (Lead Transportation Engineer) flew over the Ghazni-Gardez Road Project in an IRD helicopter to become familiar with the physical environment, terrain and get a sense the level of difficulty and challenges that his QA monitors will face.

4.1.5.2 Badakshan Bridge

Tetra Tech completed and submitted a design review and investigative report to assess the failure of Bridge #12 on the Keshim-Faizabad Road. The report, forwarded to USAID on September 21, 2010, included reviews of information provided for hydrology, hydraulic and structural aspects of the original design and recommendations for steps forward associated with the new design parameters.

4.2 Progress

FY 2010 Work Order activity under this Task Order included work on 59 Administrative Work Orders and 11 Long Term Work Orders for a total of 70 Work Orders. Following is the breakdown of number of Work Orders by sector:

- Energy: 16 Administrative Work Orders, 1 Long Term Work Order
- Water, Sanitation, and Water Resources: 16 Administrative Work Orders
- Transportation: 3 Administrative Work Orders, 3 Long Term Work Orders
- Vertical Structures: 16 Administrative Work Orders, 7 Long Term Work Orders (includes architecture, energy, and water and sanitation support)
- Technical Support Services: 9 Administrative Work Orders

The value of Long Term Work Orders (including the scope and budget extensions) total [redacted] initiated in the FY 2010. A summary of the progress of each Work Order is shown in Table 4-1. A complete listing of all the Work Orders issued under this Task Order can be found on the Work Order Status table included in Appendix A.

Table 4-1 FY 2010 Active Work Order Summary Afghanistan Engineering Support Program IQC: Task Order 01 - EDH-I-00-08-00027-00 USAID Technical Office: USAID/Office of Infrastructure, Engineering, and Energy (OIEE) Reporting Thru September 30, 2010		
Work Order Number	**Work Order Title**	**Summary of Work Completed FY2010**
WO-A: Administrative Work Orders [1]		
WO-A-0001	Review Kabul Water Study	Provided a review of the "Feasibility Study for the Extension of the Kabul Water Supply System"
WO-A-0002	Review of AUAF Master Plan Infrastructure	Reviewed of the Comprehensive Master Plan for the American University of Afghanistan, June 2006
WO-A-0002A	AUAF Master Plan Rev & SOW/ROM	Tetra Tech finalized the development of the SOW and ROM for the Phase One Concept Plan services for AUAF
WO-A-0003	GBHS Sanitation	Initial study that became WO-LT-0005
WO-A-0004	GBHS Electrical	Initial study that became WO-LT-0005
WO-A-0005	GBHS Water Supply	Initial study that became WO-LT-0005
WO-A-0006	Sardar GHS Sanitation	Initial study that became WO-LT-0006
WO-A-0007	Sardar GHS Electrical	Initial study that became WO-LT-0006
WO-A-0008	Sardar GHS Water Supply	Initial study that became WO-LT-0006
WO-A-0009	Integration of Nangarhar into NEPS	Tetra Tech prepared statements of work for a series of future long term work orders to assist the integration of the Nangarhar power distribution system into the NEPS power transmission system.
WO-A-0010	Review of BS-25 Draft Position	Provided a review for the staff position of FOREIGN SERVICE CAREER MID-LEVEL Engineering Officer (Backstop25) FS-3
WO-A-0011	HFO Feasibility for Tarakhil Power Plant	Tetra Tech provided a study on the feasibility of using heavy fuel in the Tarakhil Power Plant and factored this information into plant completion decisions and decisions regarding post-completion use of heavy fuel oil by the GIRoA.
WO-A-0012	Position Advertisements	Prepared OIEE staff positions advertisement descriptions.
WO-A-0013	Third Party MEP Review of IOM 20 Bed Hospital	Tetra Tech determined if an earlier set of review comments by URS were implemented into the drawing set.
WO-A-0014	Construction Equipment Costs	Estimated construction equipment and costs required to set up a construction equipment leasing company.
WO-A-0015	MOT Electrical	Provided a review of the electrical requirements for the Ministry of Transportation building renovation and recommended electrical transformer sizing. Tetra Tech also provided design services that included assessing the present and proposed electrical system with VICC project manager, their electrical engineer and IRD representative. Checked VICC installation method and calculations. Recommend best practice for installation.
WO-A-0016	AUAF Board of Trustees Support	Provided presentation materials to support the AUAF Board of Trustees meeting
WO-A-0017	Faculty of Education	Prepared a design review of the drawings for the Faculty of Education Centers for Balkh, Faryab, and Jawzjan

Table 4-1 FY 2010 Active Work Order Summary Afghanistan Engineering Support Program IQC: Task Order 01 - EDH-I-00-08-00027-00 USAID Technical Office: USAID/Office of Infrastructure, Engineering, and Energy (OIEE) Reporting Thru September 30, 2010		
Work Order Number	**Work Order Title**	**Summary of Work Completed FY2010**
WO-A-0018	Dam #1 Review for Pul-e-Khumri	Visited both Pul-e-Khumri I and II Hydroelectric Dam facilities in Baghlan Province to perform facility inspections, review as-built drawings and previous reports prepared by others including USACE 2008 technical site reports, and prepare a combined summary report describing additional specific work items that the USACE did not fully address or consider in its individual reports.
WO-A-0019	Dam #2 Review for Pul-e-Khumri	See summary in WO-A-0019
WO-A-0020	SEPS Additional Work	Tetra Tech provided energy planning services to assist USAID staff in preparing Scopes of Work related to rehabilitating and expanding the South East Power System (SEPS) electric transmission grid in the Helmand and Kandahar provinces.
WO-A-0021	MoEW VTC Rehab Drawing Review	Conducted drawing review of the Ministry of Energy and Water Vocational Training Center
WO-A-0022	50 Bed Wmn Hosp Drawing Review	Conducted a drawing review of the IOM 50-Bed Women's Hospital
WO-A-0023	Data Collection for Afghan Contractors Capacity Building	Conducted an investigation of how Implementing Partners utilize Afghan Contractor and prepared a summary report.
WO-A-0024	Afghan First COP Meetings	Tetra Tech will conduct two to three meetings with the Implementing Partner COPs to discuss the finding of the Afghan First Contractor Capacity Building Report.
WO-A-0025	Kajaki Dam	Visited the Kajaki Dam site in Helmand Province with USAID, USACE, and Louis-Berger project personnel to perform a site reconnaissance and technical evaluation of the work previously completed at the dam site by others as well as to further assess the project for moving forward.
WO-A-0027	National Electric Distribution Work Unit Quantity Model	Provided a template to estimate the cost to install power distribution systems.
WO-A-0028	IOM 50 BH Samangan Geotech Review	Conducted a review of the geotechnical report.
WO-A-0029	CHEF PTTC Drawing Review	Conducted a drawing review of the CHEF Provincial Teach Training Center.
WO-A-0030	ISD-DGA Proposal Review	Provided a review of a proposal for funding for an Insulated Sandwich Panel manufacturing plant.
WO-A-0031	100 BH IQC Comparison ROM	Provided a Rough Order of Magnitude Cost Estimate (ROM) for a 100 Bed Hospital for USAID to use as a comparison for proposals.
WO-A-0032	Pul-e-Khumri Cost Estimate	Tetra Tech prepared updated cost estimates for the original USACE 2008 costing. Construction cost estimates were also developed for the two hydroplant facilities that the USACE did not initially Include for both short and long-term construction time periods.
WO-A-0033	MoPH Complex Structural Design Review	Conducted a design review of the concept structural drawings for the Ministry of Public Health.

Table 4-1
FY 2010 Active Work Order Summary
Afghanistan Engineering Support Program
IQC: Task Order 01 - EDH-I-00-08-00027-00
USAID Technical Office: USAID/Office of Infrastructure, Engineering, and Energy (OIEE)
Reporting Thru September 30, 2010

Work Order Number	Work Order Title	Summary of Work Completed FY2010
WO-A-0034	Kajaki Dam SOW	Reviewed USAID Draft Contract Documents Package (bidding documents, construction drawings, and technical specifications) for the Kajaki Dam Unit 2 Turbine-Generator Installation Project.
WO-A-0036	AUAF 3D CDR Presentations	Prepared a 3-dimensional computer animation of the Concept Plan for the American University of Afghanistan.
WO-A-0037	Doshi to Salang Tunnel Pavement Design Review	Reviewed and commented on the pavement design
WO-A-0038	Execution Plan for RC-East and Nangarhar Elec Power Distribution Program	Provided planning support to USAID on preparing the execution plan.
WO-A-0039	Kajaki Dam Cost Estimate	Developed a project construction cost estimate for the Unit 2 Turbine-Generator Installation.
WO-A-0040	Power Point Presentation	Provided a presentation to USAID with tips on how to prepare and deliver an effective Power Point Presentation.
WO-A-0042	AVIPA Processing Plant Review	Conducted structural drawing reviews of the AVIPA Processing Plant and Sub-Offices.
WO-A-0043	Shahtoot and Sarobi II Dam Review	Performed project design reviews for the Shatoot Storage Dam Project and the Sarobi II Hydroelectric Dam Project in the Kabul River Basin.
WO-A-0044	Kabul University DFAC and Laundry 35% Design Review	Provided a review of the 35% design package.
WO-A-0045	Chagcharan Airport Site Visit	Conducted a third-party QA and technical review on the Chagcharan Regional Airport construction quality and progress at the request of USAID and FAA.
WO-A-0046	Jalalabad Elec Power Distribution	Tetra Tech provided planning services including assisting USAID in developing a task order to extend electric power distribution from the soon to be completed 110/20-kV substation to distribution systems, unit substations and customer services. Provided assistance to the local electric utility to refine their "commercialization" practices.
WO-A-0047	Technical Review Maimana & Faizabad Airport	Provided QC Oversight & Field Observation reports on runway and building construction
WO-A-0048	Action Memo SGFDP	Action Memorandum prepared and submitted for the Mission Director's consideration to gain approval for the amendment to Sheberghan Gas Field Development Project (SGFDP) prepared by Advanced Engineering Associates International, Inc (AEAI) for additional scope and cost.
WO-A-0049	Badakshan Bridge Independent Review	Completed and submitted an investigative report to assess the failure of Bridge #12 on the Keshim-Faizabad Road. The report included reviews of information provided for hydrology, hydraulic and structural aspects of the original design and recommendations for steps forward associated with the new design parameters.
WO-A-0050	USAID DVD/CD Filing	Developed and delivered a fully searchable Excel spreadsheet to guide USAID through a file structure set-up for tracking all implementing partner deliverables.
WO-A-0051	MOT Electrical Phase II Drawing Review	Tetra Tech provided technical support services that included design review of 100% Electrical Drawings.

Table 4-1 FY 2010 Active Work Order Summary Afghanistan Engineering Support Program IQC: Task Order 01 - EDH-I-00-08-00027-00 USAID Technical Office: USAID/Office of Infrastructure, Engineering, and Energy (OIEE) Reporting Thru September 30, 2010		
Work Order Number	**Work Order Title**	**Summary of Work Completed FY2010**
WO-A-0052	NEPS-SEPS Connection Review	Tetra Tech provided assisted USAID in exploring the concepts and possible roles for the US Government to develop options for affecting a tactical tie-in of NEPS to City of Kandahar for 30-megawatts of power transfer on a 220-kV transmission line.
WO-A-0053	ACEP Report Review	Tetra Tech provided technical support services that included a review of the ACEP Energy Efficiency Assessment Report dated August 2, 2010.
WO-A-0054	NLCC 30% Electrical Design Review	Tetra Tech provided technical support services that included a review of the NLCC 30% Electrical Drawings.
WO-A-0055	NLCC 90% Design Review	Provided Design Review of all disciplines of 90% Design package.
WO-A-0057	NEPS-Kandahar Construction Plan	Tetra Tech provided planning services that included developing a simplified construction plan to build the NEPS transmission line extension to Kandahar. The main purpose of this activity was to identify enough information to the ISAF Joint Command so that they can make an analysis of the security requirements they might need to protect the work in the field.
WO-A-0058	Afghan Standardization	Opened an investigation into the development of Afghan national construction standards and initiate a report with recommendations to USAID regarding adoption of those standards by OIEE
WO-A-0059	Parwan Road Village Electrification	Tetra Tech provided design activities that included identifying village power requirements for villages along the Parwan Road between Chimtala and Charikar for immediate CERP funding actions by RC-East. Developed a BOQ for each village.
WO-A-0060	Embassy Biodigestion Study	Conducting a brief study of best practices in large-scale municipal waste biodigestion.
WO-A-0061	Bamyan Dam Study	Tetra Tech provided the pre-planning for a field investigation to begin in November 2010.
WO-A-0062	FOHE Schematic Design Review	Provided schematic level electrical design review comments to USAID.
WO-LT: Long Term Work Orders [2]		
WO-LT-0001	Regional and Provincial Training Centers Concept and Final Design	Final plans for Regional and Provincial Training Centers submitted. Specific sites to be determined by USAID & ACSI, with site development packages to follow.
WO-LT-0002	AUAF Concept Design	Performed geotechnical and site survey work and prepared a Concept Master Plan Design for the American University of Afghanistan
WO-LT-0004	MoPH Design Management: Extension of Staff Services & Design Reviews	Performed geotechnical and site survey work and prepared a geotechnical report, hydro geological report, and site survey. Ongoing Project Management support throughout the design process; coordination with OIEE & design team. Review of Phase I building design documents.

Table 4-1
FY 2010 Active Work Order Summary
Afghanistan Engineering Support Program
IQC: Task Order 01 - EDH-I-00-08-00027-00
USAID Technical Office: USAID/Office of Infrastructure, Engineering, and Energy (OIEE)
Reporting Thru September 30, 2010

Work Order Number	Work Order Title	Summary of Work Completed FY2010
WO-LT-0005	Ghazi Boys High School (GBHS) Utility Construction Documents	Tetra Tech completed geotechnical and site survey work and prepared a geotechnical report and site survey. Design work included site grading and utility drawings and specifications. Coordinated with USAID and UNOPS throughout the design phase. Produced a bill of quantities and cost estimate based on the final design.
WO-LT-0006	SGHS Utility Construction Documents	Tetra Tech conducted site survey for base mapping purposes and performed design work on the SGHS including site grading and utility drawings and specifications. Tetra Tech coordinated with USAID and UNOPS throughout the design phase. A bill of quantities and cost estimate were developed based on the final design. Coordinated with USAID and UNOPS to begin preparation of site grading, drainage, and utility plans. Began design of an elevated water storage tank to serve the school.
WO-LT-0007	QA Oversight SPR - Southern & Eastern Afghanistan	SPR staff hired: 1-QA Manager (expat); 1 - Admin Assistant (LN); 2 - Senior Engineers (LNs); 5- QA Monitors (LNs). Ongoing training of staff in QA/QC. QA Monitors made site visits to Roads 2,4,5,8 &9. Staff coordinating with IRD to continue making site visits to balance of ongoing road projects in SPR Program.
WO-LT-0008	LAMPs for Maimana & Faizabad Airport	Preparing the Limited Airport Master Plans for Faizabad and Maimana airports. A project kick-off meeting was held with USAID and a site visit was conducted to the first priority, Faizabad Airport. Maimana site visit to be conducted in July.
WO-LT-0009	PRT Field Support	Held meetings with POC Bill Doan, USAID Reps Dick Dumford and Adriana Hayes, Greg Huger and others however USAID never identified specific PRT's for TT to work in.
WO-LT-0012	Pul-e-Khumri (PK) to Chimtala Transmission Line	Tetra Tech is providing conceptual design services for the PK and Chimtala electric transmission line upgrade.
WO-LT-0013	Three Towers Project	This project consisted of developing a design for three, 80-meter communication towers robust enough for communications systems such as microwave transmitters, TV, radio, and cell phone transmitters. The project required on-site visits to three military bases in Afghanistan which are located in Kandahar, Helmand, and Zabul. Tetra Tech is continuing to provide services for bidding and construction.
WO-LT-0015	Kabul University Men's Dormitory Construction Inspection and DFAC 65% and 100% Design Review	Provided third party QC for DFAC, Laundry, and Men's Dormitory. Design Review of 100% drawings forthcoming. Construction Technical support and Field Observation duties ongoing.

Notes [(#)]:

(1) Work Orders with anticipated level of effort of 18-mandays or less

(2) Work Orders that are planned to equal more than 18-mandays

5.0 FY2011 Initiatives

5.1 Existing Long Term Work Orders

Efforts will continue on numerous long term work orders in the all five sectors. The following sections describe the anticipated activities for FY2011 under Long Term Work Orders:

5.1.1 Energy

First quarter 2011 work in the energy sector is expected to include the completion of the current studies of the Afghan national transmission and generation systems, delivering reliable commercial power to selected customers in Kabul and possibly further study of a new transmission line from Kabul to Kandahar. Conceptual designs for commercial electrical distribution to villages in RC East is expected to continue and expand to new districts.

5.1.2 Vertical Structures

Site Development packages for the prototype regional and provincial Afghanistan Civil Service Institute training facilities will be ongoing. This work will include development on four sites throughout Afghanistan and will begin with geotechnical and survey studies. 100% drawing reviews will be performed for the Kabul University Men's Dining and Laundry Facilities, along with construction oversight and technical support. Kabul University Men's Dormitory renovation design review will be performed at the 35%, 65% and 100% levels, along with Quality Control and technical oversight. The MoPH (WOLT-0004) work order will require ongoing project management services through the remainder of the building design and site development process and provide multi-discipline construction design drawing reviews of plans prepared by others.

5.1.3 Water and Sanitation

The Ghazi Boys High School site grading and utilities contract is currently being bid by UNOPS, the implementing partner to USAID for the construction phase of this project. It is anticipated that USAID/UNOPS will want Tetra Tech to provide services during construction of this project to include submittal review, meeting attendance, RFI responses, etc. Good construction practice requires that the design engineer assist the construction management team (UNOPS and USAID) during the construction phase. The construction duration for this project is estimated to be approximately six months. It is not known when this project will be awarded and construction will get underway.

The new GBHS Administration Building sitework and utilities contract is currently being designed by Tetra Tech (URS is designing the Administration Building structure). The design is expected to be completed by mid-November 2010. Tetra Tech will produce a bill of quantities and cost estimate for the completed design. It is anticipated that USAID will develop an implementing partner agreement with UNOPS for the construction of this facility (similar to the agreement used for the construction of the boys high school and the associated sitework and utilities contract). As discussed in the previous paragraph, it is anticipated that USAID/UNOPS will want Tetra Tech to provide services during construction of this project, to include submittal review, meeting attendance, RFI responses, etc. The construction duration for this project is estimated to be approximately 4 months. The construction project probably will not be ready to bid until December 2010.

Bid documents for the Sardar Girls High School (SGHS) site grading and utilities contract were submitted in late September 2010. As with the previous two projects, it is anticipated that USAID will develop an implementing partner agreement with UNOPS for the construction of this facility, and it is anticipated that USAID/UNOPS will want Tetra Tech to provide services during construction of this project. The construction duration for this project is estimated to be approximately six months. It is not known when this project will be awarded and construction will get underway.

To date, Tetra Tech has not discussed any further design work on water and sanitation projects with USAID. Other projects such as the Regional and Provincial Training Centers (WO-LT-0001) may involve sitework and utilities design if a training center design is to be adapted to a specific site.

5.1.4 Water Resources

Over the coming year, Tetra Tech will continue services on several Water Resources work orders. Third-party QA and technical review services will continue to be provided USAID and FAA on the Maimana and Faizabad Regional Airports in Afghanistan. A detailed design review is presently being completed for the Topchi Hydroplant Canal Project (Bamyan Province) construction documents (prepared by Winrock International). This project reportedly is soon to be bid out for construction.

Tetra Tech will also soon be conducting a dam site reconnaissance investigation with USAID in the Province of Bamyan. Independent geologic mapping tasks for several USAID proposed dam and reservoir sites are expected as well as design-base studies for several USAID proposed multipurpose dam and reservoir projects, including hydropower generation.

Tetra Tech also expects continued work on feasibility-level design studies for the USAID proposed Sarobi II Hydroelectric Dam Project.

5.1.5 Transportation

Work in the Transportation sector will ramp up with the SPR program. Work on the LAMPs work order will continue with the reach back assistance for two reports.

5.1.5.1 Strategic Provincial Roads (SPR) Program

Afghan candidates for the QA monitors/engineers positions were interviewed in August and September of 2010. Six candidates, to date, have been selected to fill some of the positions for monitoring the eastern and southern provinces as identified in the SPR Program. These candidates are scheduled to begin working in October 2010. The first order of work for the new hires is to become familiar with the project documents (plans and specifications) of the roads that they will be assigned. QA/QC training will be provided to the Afghan monitors/engineers throughout the duration of the program. Tetra Tech and IRD will continuously coordinate site visits of Tetra Tech QA monitors to the various SPR projects. Site visits will be made at a frequency 1 to 2 times per month for the gravel roads and more often for the Ghazni-Gardez paved road. The frequency of the visits will be contingent upon the progress of work and the status of security at the project sites.

5.2 Pending Work Orders

Vocational Training Center (VTC) Green Design
(WO-LT-0014):
Under this long term work order, Tetra Tech is requested to prepare construction plans from already produced concept design plans for the VTC building. As part of the final design, Tetra Tech would focus on green/sustainable building design components.

Tara Kheyl School Site Civil
(WO-LT-0018):
The scope of this long term work order is to provide a 100% construction drawing site design package, with technical specifications, including existing utilities, new water well, site boundary/topographic survey, and geotechnical report for the new Tara Kheyl Girl's School Building.

Sheberghan Gas Field Well Development, Gas Transmission Line Engineering
(WO-LT-0020):
The Sheberghan gas field is located 150 KM West of Mazar-i-Sharif where the Soviet Union developed a natural gas field with a gas transmission line out of the field which ends near Mazar-i-Sharif. Most of the field's gas is high in sulfur (sour gas) and production capability is unknown. TetraTech has subcontracted with Wills Brothers, a well known natural gas exploration company, to determine the economic viability of infrastructure repairs or new facilities to develop the gas field into an energy production center. The funding for the other infrastructure is contingent upon the ability to quantify the field's ability to produce natural gas.

Sheberghan Electrical Transmission Line Field Investigations
(WO-LT-0021):
The scope of this work order is to provide a technical evaluation of the existing Sheberghan to Mazar-e-Sharif electrical transmission line to determine the reconstruction costs and effort to rehabilitate the line. Currently this line is no longer in service and a engineering field survey will be conducted to evaluate the extent of rework and replacement of towers/conductors that will be required to re-commission the line back into service as part of the NEPS grid.

Kabul Electric Power Reliability Study for the US Embassy, ISAF, USAID, Military Hospital
(WO-LT-0022):
The scope of this work order is to study the most efficient and reliable feasible power source for the US Embassy, ISAF, USAID, and Military Hospital. AESP (Tetra Tech) proposes to produce a report that includes recommendations, conceptual design, contractual feasibility, proposed system configurations and conceptual cost estimates.

Afghanistan Electrical Transmission & Generation Study
(WO-LT-0023):
The objective of this work order is to expeditiously conduct a strategically focused study of the Afghanistan power grid to identify projects that are clearly needed as well as scope the next, more detailed level of planning and analysis, including identifying the effort needed to effectively gather the information necessary for next, more detailed level of study. The study will be based upon information that can be readily obtained from the Afghan Energy Information Center supplemented by direct consultation with Afghan entities that could include the MEW, DABS, and other stakeholders. The study will include an analysis of the existing Afghanistan Power grid, major existing and potential load centers throughout the country, forecasted growth levels for the next twenty (20) year period, and analysis of planning scenarios for the future grid.

Sheberghan Gas Processing Plant and Fertilizer Plant Engineering Oversight
(WO-LT-0024):
This WO works in tandem with the LT-0020 Gas Field Development WO. The Soviet Union built two, large facilities in conjunction with the Natural gas field at Sheberghan, a De-sulfuring plant which scrubbed the sulfur out of the natural gas, and a fertilizer plant which generated 48 megawatts of power and produced a low quality fertilizer. This work order will investigate the economic viability of capital investment in these two plants to determine if there would be a return on private investment capital. TetraTech will use the services of Wills Brothers, a consulting engineering firm that specializes in natural gas infrastructure, to produce the deliverables of this work order.

RC-East Villages Electrification
(WO-LT-0025):
The objective of this long term work order is to provide conceptual design services and development Bills of Quantity (BoQs) suitable for RC-East to purchase materials with Commanders Emergency Response Program (CERP) funds for each village to be electrified. RC-East requires verification that the materials supplied have been used for their intended purpose.

6.0 Financial

FY 2010 contract MOD activity increased the obligated funding to [redacted] through a series of MODs. Four modifications; MOD 4,MOD 5, MOD 6 and MOD 8; addressed additional staffing requested by USAID, staffing and resource needs for WOLT-0008 (LAMPs), and revised the Labor Categories and Work Days Ordered (LOE) of the Task Order. MOD 8 moved funds from the contract years 3 through 5 and into years 1 and 2.

USAID originally requested a "reinstatement" MOD to restore the funds for years 3 through 5 by discipline, labor category and work days. The "reinstatement" MOD will now be resubmitted and evaluated in February 2011.

6.1 Invoices, Projected Burn Rates, and Reach Back Usage

Table 8-1 AESP Expenditures and Burn Rate		
AESP FY2011 Invoices:		
October 2010	[redacted]	
November 2010	[redacted]	
December 2010	[redacted]	
Subtotal Q1 Expenditures		[redacted]
January 2010	[redacted]	
February 2010	[redacted]	
March 2010	[redacted]	
Subtotal Q2 Expenditures		[redacted]
April 2010	[redacted]	
May 2010	[redacted]	
June 2010	[redacted]	
Subtotal Q3 Expenditures		[redacted]
July 2010	[redacted]	
August 2010	[redacted]	
September (Estimated) 2010	[redacted]	
Subtotal Q4 Expenditures		[redacted]
Cumulative Expenditures through September 29, 2010		[redacted]
Current Estimated Average Burn Rate per Month	[redacted]	

6.2 Contract/Task Order Issues

Status of Obligated Funds: Based on the current billing and projected burn rate, the [redacted] in Obligated Funding will be exhausted in mid-July 2011.

Level of Effort Summary: As of September 26, 2010; 2,772 reach back man-days and 3,492 in-country man days for a total 6,264 man days were expended. The estimated LOE for the first contract year was 2,000 reach back man-days and 4,410 in-country man days for a total 6,410 man days budgeted. Additional home office support budget will be requested based upon actual work load to date.

Appendix A

Work Order Status

WORK ORDER STATUS
Afghanistan Engineering Support Program
Reporting Thru September 26, 2010

Energy
Water Resources
Vertical Structures
Transportation
Water and Sanitation
Multi-Disciplinary

Work Order Number	Program Type[3]	Description	Status[4]	Estimated Cost (ROM)	In Country Cost to Date[5]	Reach Back Cost to Date[5]	Total Cost to Date[5]
WO-A: Administrative Work Orders [1]							
WO-A-0001	W/S	Review Kabul Water Study	Complete	NA	[redacted]	[redacted]	[redacted]
WO-A-0001A	W/S	Review of Kabul Water MTP-1 Bid Docs	Complete	NA	[redacted]	[redacted]	[redacted]
WO-A-0002	VS, E, & W/S	Review of AUAF Master Plan Infrastructure	Complete	NA	[redacted]	[redacted]	[redacted]
WO-A-0002A	VS, E, & W/S	AUAF Master Plan Rev & SOW/ROM	Complete	NA	[redacted]	[redacted]	[redacted]
WO-A-0003	W/S	GBHS Sanitation	Complete	NA	[redacted]	[redacted]	[redacted]
WO-A-0004	E	GBHS Electrical	Complete	NA	[redacted]	[redacted]	[redacted]
WO-A-0005	W/S	GBHS Water Supply	Complete	NA	[redacted]	[redacted]	[redacted]
WO-A-0006	W/S	Sardar GHS Sanitation	Complete	NA	[redacted]	[redacted]	[redacted]
WO-A-0007	E	Sardar GHS Electrical	Complete	NA	[redacted]	[redacted]	[redacted]
WO-A-0008	W/S	Sardar GHS Water Supply	Complete	NA	[redacted]	[redacted]	[redacted]
WO-A-0009	E	Integration of Nangarhar into NEPS	Complete	NA	[redacted]	[redacted]	[redacted]
WO-A-0010	TS	Review of BS-25 Draft Position	Complete	NA	[redacted]	[redacted]	[redacted]
WO-A-0011	E	HFO Feasibility for Tarakhil Power Plant	Complete	NA	[redacted]	[redacted]	[redacted]
WO-A-0012	TS	Position Advertisements	Complete	NA	[redacted]	[redacted]	[redacted]
WO-A-0013	E	Third Party MEP Review of IOM 20 Bed Hospital	Complete	NA	[redacted]	[redacted]	[redacted]
WO-A-0014	TS	Construction Equipment Costs	Complete	NA	[redacted]	[redacted]	[redacted]
WO-A-0015	E	MOT Electrical	Complete	NA	[redacted]	[redacted]	[redacted]
WO-A-0016	VS	AUAF Board of Trustees Support	Complete	NA	[redacted]	[redacted]	[redacted]
WO-A-0017	VS	Faculty of Education	Complete	NA	[redacted]	[redacted]	[redacted]
WO-A-0018	WR	Dam #1 Review for Pul-e-Khumri	Complete	NA	[redacted]	[redacted]	[redacted]
WO-A-0019	WR	Dam #2 Review for Pul-e-Khumri	Complete	NA	[redacted]	[redacted]	[redacted]
WO-A-0020	E	SEPS Additional Work	Complete	NA	[redacted]	[redacted]	[redacted]
WO-A-0021	VS	MoEW VTC Rehab Drawing Review	Complete	NA	[redacted]	[redacted]	[redacted]
WO-A-0022	VS	50 Bed Wmn Hosp Drawing Review	Complete	NA	[redacted]	[redacted]	[redacted]
WO-A-0023	TS	Data Collection for Afghan Contractors Capacity Building	Complete	NA	[redacted]	[redacted]	[redacted]
WO-A-0024	TS	Afghan First COP Meetings	Open	NA	[redacted]	[redacted]	[redacted]
WO-A-0025	WR	Kajaki Dam	Complete	NA	[redacted]	[redacted]	[redacted]
WO-A-0026	T	Environmental Haz Waste Assessment	Cancelled	NA	[redacted]	[redacted]	[redacted]
WO-A-0027	E	National Electric Distribution Work Unit Quantity Model	Complete	NA	[redacted]	[redacted]	[redacted]
WO-A-0028	VS	IOM 50 BH Samangan Geotech Review	Complete	NA	[redacted]	[redacted]	[redacted]
WO-A-0029	VS	CHEF PTTC Drawing Review	Complete	NA	[redacted]	[redacted]	[redacted]
WO-A-0030	VS	ISD-DGA Proposal Review	Complete	NA	[redacted]	[redacted]	[redacted]
WO-A-0031	VS	100 BH IQC Comparison ROM	Complete	NA	[redacted]	[redacted]	[redacted]
WO-A-0032	WR	Pul-e-Khumri Cost Estimate	Complete	NA	[redacted]	[redacted]	[redacted]
WO-A-0033	VS	MoPH Complex Structural Design Review	Complete	NA	[redacted]	[redacted]	[redacted]
WO-A-0034	WR	Kajaki Dam SOW	Complete	NA	[redacted]	[redacted]	[redacted]
WO-A-0035	VS	Vertical Structures Best Practices Document Outline	Pending	NA	[redacted]	[redacted]	[redacted]
WO-A-0036	VS	AUAF 3D CDR Presentations	Complete	NA	[redacted]	[redacted]	[redacted]
WO-A-0037	T	Doshi to Salang Tunnel Pavement Design Review	Complete	NA	[redacted]	[redacted]	[redacted]
WO-A-0038	E	Execution Plan for RC-East and Nangarhar Elec Power Distribution Program	Open	NA	[redacted]	[redacted]	[redacted]
WO-A-0039	WR	Kajaki Dam Cost Review	Open	NA	[redacted]	[redacted]	[redacted]
WO-A-0040	TS	Power Point Presentation	Complete	NA	[redacted]	[redacted]	[redacted]
WO-A-0041	VS	AVIPA Raison Drying Bed Review	Cancelled	NA	[redacted]	[redacted]	[redacted]
WO-A-0042	VS	AVIPA Processing Plant Review	Complete	NA	[redacted]	[redacted]	[redacted]
WO-A-0043	WR	Shahtoot and Sarobi II Dam Review	Open	NA	[redacted]	[redacted]	[redacted]
WO-A-0044	VS, E, & W/S	Kabul University DFAC and Laundry 35% Design Review	Complete	NA	[redacted]	[redacted]	[redacted]
WO-A-0045	T	Chagcharan Airport Site Visit	Open	NA	[redacted]	[redacted]	[redacted]
WO-A-0046	E	Jalalabad Elec Power Distribution	Open	NA	[redacted]	[redacted]	[redacted]
WO-A-0047	T	Technical Review Maimana & Faizabad Airport	Open	NA	[redacted]	[redacted]	[redacted]

Work Order Number	Program Type[3]	Description	Status[4]	Estimated Cost (ROM)	In Country Cost to Date[5]	Reach Back Cost to Date[5]	Total Cost to Date[5]
WO-A-0048	TS	Action Memo SGFDP	Complete	NA	[redacted]	[redacted]	[redacted]
WO-A-0049	WR	Badakshan Bridge Independent Review	Open	NA	[redacted]	[redacted]	[redacted]
WO-A-0050	TS	USAID DVD/CD Filing	Open	NA	[redacted]	[redacted]	[redacted]
WO-A-0051	E	MOT Electrical Phase II Drawing Review	Open	NA	[redacted]	[redacted]	[redacted]
WO-A-0052	E	NEPS-SEPS Connection Review	Open	NA	[redacted]	[redacted]	[redacted]
WO-A-0053	E	ACEP Report Review	Open	NA	[redacted]	[redacted]	[redacted]
WO-A-0054	E	NLCC 30% Electrical Design Review	Complete	NA	[redacted]	[redacted]	[redacted]
WO-A-0055	VS	NLCC 90% Design Review	Open	NA	[redacted]	[redacted]	[redacted]
WO-A-0056	VS	LGCDNA070 Communications Tower Review	Pending	NA	[redacted]	[redacted]	[redacted]
WO-A-0057	E	NEPS-Kandahar Construction Plan	Open	NA	[redacted]	[redacted]	[redacted]
WO-A-0058	TS	Afghan Standardization	Open	NA	[redacted]	[redacted]	[redacted]
WO-A-0059	E	Parwan Road Village Electrification	Open	NA	[redacted]	[redacted]	[redacted]
WO-A-0060	W/S	Embassy Biodigestion Study	Open	NA	[redacted]	[redacted]	[redacted]
WO-A-0061	WR	Bamyan Dam Study	Open	NA	[redacted]	[redacted]	[redacted]
WO-A-0062	VS	FOHE Schematic Design Review	Open	NA	[redacted]	[redacted]	[redacted]
WO-A-0064	E	Sufyane Village Electrification	Pending	NA	[redacted]	[redacted]	[redacted]
WO-A-0063	WR	Topchi Hydropower Plant Canal Review	Pending	NA	[redacted]	[redacted]	[redacted]
WO-LT: Long Term Work Orders[2]							
WO-LT-0001	VS	Regional and Provincial Training Centers Concept and Final Design	Open	[redacted]	[redacted]	[redacted]	[redacted]
WO-LT-0002	VS, E, & W/S	AUAF Concept Design	Complete	[redacted]	[redacted]	[redacted]	[redacted]
WO-LT-0003	VS	Prototype Garage 100% Design	Cancelled	[redacted]	[redacted]	[redacted]	[redacted]
WO-LT-0004	W/S, E	MoPH Design Management: Extension of Staff Services & Design Reviews	Open	[redacted]	[redacted]	[redacted]	[redacted]
WO-LT-0005	W/S, E	GBHS Utility Construction Documents	Open	[redacted]	[redacted]	[redacted]	[redacted]
WO-LT-0006	W/S, E	SGHS Utility Construction Documents	Open	[redacted]	[redacted]	[redacted]	[redacted]
WO-LT-0007	T	QA Oversight SPR - Southern & Eastern Afghanistan	Open	[redacted]	[redacted]	[redacted]	[redacted]
WO-LT-0008	T	LAMPs for Maimana & Faizabad Airport	Open	[redacted]	[redacted]	[redacted]	[redacted]
WO-LT-0009	T	PRT Field Support	Open	[redacted]	[redacted]	[redacted]	[redacted]
WO-LT-0010	VS	MOPH Drawings Review	Cancelled	[redacted]	[redacted]	[redacted]	[redacted]
WO-LT-0011	E	Tarakhil Start-Up Inspection	Cancelled	[redacted]	[redacted]	[redacted]	[redacted]
WO-LT-0012	E	PK to Chimtala Transmission Line	Open	[redacted]	[redacted]	[redacted]	[redacted]
WO-LT-0013	VS	Three Towers Project	Open	[redacted]	[redacted]	[redacted]	[redacted]
WO-LT-0014	VS	VTC Green Design	Pending	TBD	$0	$0	$0
WO-LT-0015	VS, E, & W/S	Kabul University Men's Dormitory Construction Inspection and DFAC 65% and 100% Design Review	Open	[redacted]	[redacted]	[redacted]	[redacted]
WO-LT-0016	E	Kandahar 10 MW Solar	Pending	TBD	$0	$0	$0
WO-LT-0018	VS	Tara Khil School Site Civil	Pending	[redacted]	[redacted]	[redacted]	[redacted]
WO-LT-0019	T	US Embassy Air Facility Construction QA	Pending	[redacted]	[redacted]	[redacted]	[redacted]
WO-LT-0020	E	Sherberghan Gas Field Well Development, Gas Transmission Line Engineering Oversight	Pending	TBD	$0	$0	$0
WO-LT-0021	E	Selected Electrical Transmission Line Field Investigations	Pending	TBD	$0	$0	$0
WO-LT-0022	E	Selected Customer High Reliability Commercial Electric Power Study	Pending	TBD	$0	$0	$0
WO-LT-0023	E	Afghanistan Electrical Transmission & Generation Master Plan Study	Pending	TBD	$0	$0	$0
WO-LT-0024	E	Sherberghan Gas Processing Plant and Fertilizer Plant Engineering Oversight	Pending	TBD	$0	$0	$0
WO-LT-0025	E	RC-East Villages Electrification	Pending	TBD	$0	$0	$0
WO-LT-00xx	W/S	Bio Sand Filter	Cancelled				
WO-LT-00xx	T	Herat-Chaghcharan Road Illustrative Task Order	Cancelled		$0	$0	$0
WO-LT-00xx	VS	AEIC Building Construction Drawings	Cancelled		$0	$0	$0

Notes [#]:

(1) Work Orders with anticipated level of effort of 18-mandays or less

(2) Work Orders that are planned to equal more than 18-mandays

(3) Program Type: Technical Support (TS), Energy (E), Transportation (T), Vertical Structures (VS), Water/Sanitation (W/S) or Water Resources (WR)

(4) Status: Pending Approval, Open, or Complete

(5) Labor, expenses, OH, GA, and fee. Does not include Power Engineering costs.

Project Issues Summary

Project Issues Summary	Key			
	R	🔴	Issue requires direction or is behind schedule.	
Afghanistan Engineering Support Program (AESP)	Y	🟡	Issue is proceeding but clarification or direction is required for completion.	
UPDATED: 27 September 2010 By: [redacted]	G	🟢	Issue is proceeding and is expected to be completed on schedule.	

Issue	Status			Action Required
CONTRACT PLANS				
Annual Work Plan	Y	🟡	Draft Year 2 Work Plan Submitted 9/1/10.	USAID to review and comment to finalize. Meeting held 9/27 to discuss.
PMP (Performance Monitoring Plan)	G	🟢	Final PMP submitted 4/3/2010	
Quarterly Progress Reports	G	🟢	Draft Q3 Quarterly Report submitted 7/10/10. TT finalized Q3 Report 7/22/10.	Next quarterly report due January 10, 2011
Annual Report for Each FY	G	🟢		TT to submit November 1, 2010
PSC - Karzai Decree	R	🔴	TT COP submitted initial response as requested by USAID CO.	**OAA** Update
Armored Vehicles	R	🔴	Tetra Tech requested to purchase 3-armored vehicles on 7/10/10. The possibility of USAID furnishing the vehicles is being considered. Waiver to purchase in-country under consideration.	**OAA** response needed
CAC Cards	Y	🟡	CAC Cards discussed at contracts meeting 7/27/10. TT received SPOT Coordinator Info 7/28/10. TT sent a list of leads and long term expats to USAID 8/6/10. TT received USAID letter to use DoD DEER stations. Issue: Data entry isues. COP emailed [redacted] (USAID SPOT coord) on 9/6/10 on status.	**OAA** response to TT request submitted 8/6/10. Next step is for USAID and TT SPOT Coordinators to communicate.
	Y	🟡	TT would like to add security firm personnel to CAC card list. USAID confirmed personnel must be entered into SPOT if carrying weapons. TT needs confirmation that entering data is project specific.	**OAA** response needed.
Subcontractor and Purchase Limit for Consent	G	🟢	CO approved $25K Micro-purchase, RFP required for amount over $25K, and CO consent needed for amount over $150K.	
Financial				
Status of Obligated Funds and Budget Approval	G	🟢	"Reinstatement" MOD proposal submitted 7/23/10. USAID suggested that TT not prepare this MOD and reevaluate LOE in 6-months (Feb-2011).	Recent LOE changes discussed at meeting on 9/27.
Contract Expenditure Status	G	🟢	At the current expected burn rate, the current obligated funding ([redacted]) is expected to be depleted early December 2010.	TT to discuss first Tuesday of each month
Funding Increase	Y	🟡	COTR Processing [redacted] Funding Increase. MAARD apprv expected 9/9 MOD expected 9/30/10	COTR Action Required
4th Quarter Accruals	G	🟢	TT provided 4th quarter accruals 9/11/10.	TT to provide next quarterly billing and burn 12/15/10.

Project Issues Summary	Key			
	R		Issue requires direction or is behind schedule.	
Afghanistan Engineering Support Program (AESP)	Y		Issue is proceeding but clarification or direction is required for completion.	
UPDATED: 27 September 2010 By: [redacted]	G		Issue is proceeding and is expected to be completed on schedule.	

Issue	Status			Action Required
TT Compound Expansion	Y		TT presented expansion proposal to COTR on 8/15/10. TT submitted proposal 9/9/10. Resubmitted to [redacted] for review and processing 9/15/10. [redacted] due back 10/03/10.	**OAA** approval needed.
1420s & Staffing Approval				
1420 Approvals for Tetra Tech Employees (Including EMI)	G		Updated 1420 Status List submitted to OIEE 9/27/10	**OAA** (COTR?) action required on 13
1420 Approvals for Power, Seimens, and NESC	G		Updated 1420 Status List submitted to OIEE 9/27/10	**OAA** (COTR?) action required on 0
Base Contract Staff				
Expat Civil/Structural Engineer	Y		TT moved [redacted] into PRT role to fulfill current needs.	TT to submit CV for technical approval
Expat SPR QA Inspector	G		Expat identified.	COTR approval required
Expat Energy (Electrical) Engineer	G		This position could replace base contract Mechanical because of need in Energy sector.	COTR approval required
Expat STTA Power (Energy Electrical) Engineer	R		USAID is requesting 1-fulltime STTA for 30-60 days to work on the NEPS-SEPS Tactical Tie-in	COTR approval required
COP Transition Confirmation Letter	G		Letter to be submitted 9/28.	OAA approval required
Misc Items				
USAID Requesting 2-3 Power engineers to work with MEW for 1-year	Y		4/12/10 TT confirmed ability to provide supply and requested 45 days notice to deploy.	USAID will confirm the need, timing, and required qualifications and then prepare a request.
USAID Fact Sheet	Y		9/15/2010 - Sent to USAID for review and approval	COTR approval needed
Success Stories (Periodic)	Y		USAID would like to see one per week on completed work orders. TT completed KU Mentoring, Draft of Afghan First, and Draft of AUAF stories	TT to prepare NEPS to Kandahar Tactical Tie-In story. When projects complete, TT to prepare stories on 3-Towers and LAMPS.

Appendix B

Project Deliverables (CD)

USAID/Afghanistan
U.S. Embassy Cafe Compound
Great Masood Road
Kabul, Afghanistan
Tel: 202.216.6288
http://afghanistan.usaid.gov